

Amendments to the Specification:

Page 8, please rewrite the paragraph commencing at line 11, as follows:

A1
A typical LEC includes a number of central office (CO) switches for interconnecting customer premises terminating equipment with the PSTN. For an LEC including the AIN 10 as illustrated in Figure 1, the central office switches may be provided as Service Switching Points (SSP) switches 12 12A-12N. The dashed line 14 between the SSP switches 12 12A-12N indicates that the number of SSP switches 12 12A-12N in the AIN 10 may vary depending on the particular requirements of the AIN 10. The AIN 10 may also include a non-SSP switch 16. The difference between the SSP switches 12 12A-12N and the non-SSP switch 16 is that the SSP switches 12 12A-12N provide intelligent network functionality. Interconnecting the SSP switches 12 12A-12N and the non-SSP switch 16 are communication links 18 18A-18N which may be, for example, trunk circuits.

Please rewrite the paragraph commencing at page 8, line 20 and extending to page 9, line 6, as follows:

A2
Each SSP switch 12 and non-SSP switch 16 has a number of subscriber lines 20 connected thereto. The subscriber lines 20 20A-20N may be, for example, conventional twisted pair loop circuits connected between the switches 12 12A-12N, 16 and the telephone drops for the customer premises, or the subscriber lines 20 20A-20N may be trunk circuits, such as T-a trunk circuits. Typically, the number of subscriber lines 20 connected to each switch 12 12A-12N, 16 is on the order of ten thousand to one hundred thousand lines. Each of the subscriber

AR lines 20 20A-20N is connected to a terminating piece of customer premises equipment, represented in Figure 1 by the landline telephones 22 22A-22N. Alternatively, the terminating equipment may be other types of telecommunications units such as, for example, a telecopier, a personal computer, a modem, or a private branch exchange (PBX) switching system.

Page 9, please rewrite the paragraph commencing at line 7, as follows:

A3 For the AIN 10 illustrated in Figure 1, each SSP switch 12 12A-12N and the non-SSP switch 16 are connected to a signal transfer point (STP) 24 via a communication link 26 26A-26N. The communication link 26 26A-26N may employ, for example, the SS7 switching protocol. The STP 24 may be a multi-port high speed packet switch that is programmed to respond to the routing information in the appropriate layer of the switching protocol, and route the data packets to their intended destination.

Page 10, please rewrite the paragraph commencing at line 3, as follows:

A4 The AIN 10 illustrated in Figure 1 also includes a services node (SN) 34. The SN 34 may be, for example, a Compact Services Node (CSN) available from Lucent Technologies Inc., Murray Hill, NJ, although the SN 34 may be any other type of available AIN-compliant SN. The SN 34 may be connected to one or more of the SSP switches 12 12A-12N via a communications link 36 which may be, for example, an Integrated Service Digital Network (ISDN), including BRI (Basic Rate Interface) or PRI (Primary Rate Interface) lines. According to other embodiments, the communications link 36 may be, for example, a T-1 trunk circuit.

Page 10, please rewrite the paragraph commencing at line 17, as follows:

A5
In order to keep the processing of data and calls as simple as possible at the switches, such as at the SSP switches ~~12~~ 12A-12N, a set of triggers may be defined at the SSP switches ~~12~~ 12A-12N for each call. A trigger in an AIN is an event associated with a particular subscriber line ~~20~~ 20N that generates a data packet to be sent from the SSP switch ~~12~~ 12N servicing the particular subscriber line ~~20~~ 20N to the SCP 28 via the STP 24. The triggers may be originating triggers for calls originating from the subscriber premises or terminating triggers for calls terminating at the subscriber premises. A trigger causes a message in the form of a query to be sent from the SSP switch ~~12~~ 12N to the SCP 28.

Page 11, please rewrite the paragraph commencing at line 1, as follows:

A6
The SCP 28 in turn interrogates the database 32 to determine whether some customized call feature or enhanced service should be implemented for the particular call, or whether conventional dial-up telephone service should be provided. The results of the database inquiry are sent back for the SCP 28 to the SSP switch ~~12~~ 12N via the STP 24. The return packet includes instructions to the SSP switch ~~12~~ 12N as to how to process the call. The instructions may be to take some special action as a result of a customized calling service or enhanced feature. For example, for an enhanced calling feature requiring the capabilities of the SN 34, the return message from the SCP 28 may include instructions for the SSP switch ~~12~~ 12N to route the call to the SN 34. In addition, the return message from the SCP 28 may simply be an indication that there is no entry in the database 32 that indicates anything other than conventional telephone service should be provided for the call. The query and return messages may be formatted, for

example, according to conventional SS7 TCAP (Transaction Capabilities Application Part)

A6 formats. U.S. Patent 5,438,568, which is incorporated herein by reference, discloses additional details regarding the functioning of an AIN.

Page 13, please rewrite the paragraph commencing at line 13, as follows:

A7 The landline network 42 additionally includes a tandem office 60, which provides a switching interface between the landline network 42 and the wireless network 44. The tandem office 60 may be in communication with the MSC 46 via a communications link 62, which may be, for example, a trunk circuit or an ISDN. In addition, the tandem office ~~54~~ 60 may be in communication with the CO switches (such as the CO switches 12a, c as illustrated in Figure 2) via communications links 64, 66 respectively, which may be, for example, trunk circuits.

Page 15, please rewrite the paragraph commencing at line 3, as follows:

A8 Conversely, if at block 84 the SCP 28 determines that the SN 34 is operational, the process may advance to block 88, where the SCP 28 may determine if the service subscriber currently has the service activated. The SCP 28 may perform this function by interrogating the SCP database 32. If the service is not currently activated, the process advances to block ~~84~~ 86, where the SCP 28 may send an authorize termination message to the CO switch _termination message to the CO switch 12a to route the call to the landline telephone 22a, without additionally forwarding the call to the subscriber's wireless telephone unit.

Page 15, please rewrite the paragraph commencing at line 10, as follows:

A9 On the other hand, if the SCP 28 determines at block 88 that the service is activated, the process advances to block 90, where the SCP 28 determines whether the calling party number matches the subscriber wireless number (i.e., the directory number for the wireless unit 52), which is stored in the SCP database 32. If the numbers match, then the process advances to block 84 86 where the SCP 28 may send an authorize_termination message to the CO switch 12a to route the call to the landline telephone 22a, without additionally forwarding the call to the subscriber's wireless telephone unit, because this contingency typically corresponds to the subscriber calling home from the subscriber's wireless telephone, thus obviating the need to additionally ring the subscriber's wireless telephone.

Page 17, please rewrite the paragraph commencing at line 11, as follows:

A10 Referring now to Figure 4, the process advances from block 96 to block 100, where the SN 34 places a first outgoing call. The intended destination of the first call from the SN 34 is the subscriber's wireless unit 52. However, because the SN 34 does not have data regarding the subscriber's wireless directory number, the SN 34 sends the first call to the CO switch 12a with a wireless indicator. For example, according to an embodiment where the communications link 36 is a PRI trunk, the SN 34 may establish the call via a channel_setup_PRI trigger assigned to the SN PRI trunk 36, and a "wireless call" indication digit may be included in the redirecting_number field.